

Lunch Price Prediction

Should you get MealPal?





Tacos

Taco with meat	RG \$4.00/SUPER \$6.40
Vegetarian Taco	RG \$3.00/SUPER \$4.80

Burritos

Burrito with meat	RG \$8.50/SUPER \$10.90
Vegetarian Burrito	RG \$4.00/SUPER \$5.80

Quesadillas

Corn	RG \$2.00/SUPER \$3.80
Flour	RG \$3.50/SUPER \$5.30
Corn with meat	RG \$4.60/SUPER \$6.40
Flour with meat	RG \$8.50/SUPER \$10.90

La Taquera



Regular Meat Tacos and Burritos include choice of Meat, Beans (whole refried or pinto), and Pico de Gallo - and hot sauce if you please!

Super = Regular + sour cream, cheese, & avocado

Choice of Meats

- Beef (Carne Asada)
- Sausage (Chorizo)
- Pork (Carnitas)
- Chicken (Pollo)
- Beef Head (Cabeza)*
- Beef Tongue (Lengua)*

*Served with meat, onions, and cilantro

Vegetarian - Pinto Beans, Cheese, and Fresh Salsa

Extras

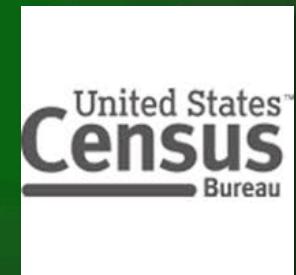
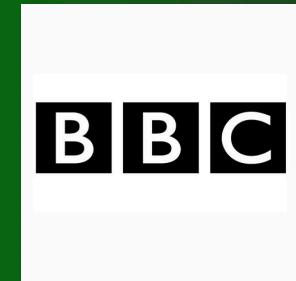
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Sources of Information

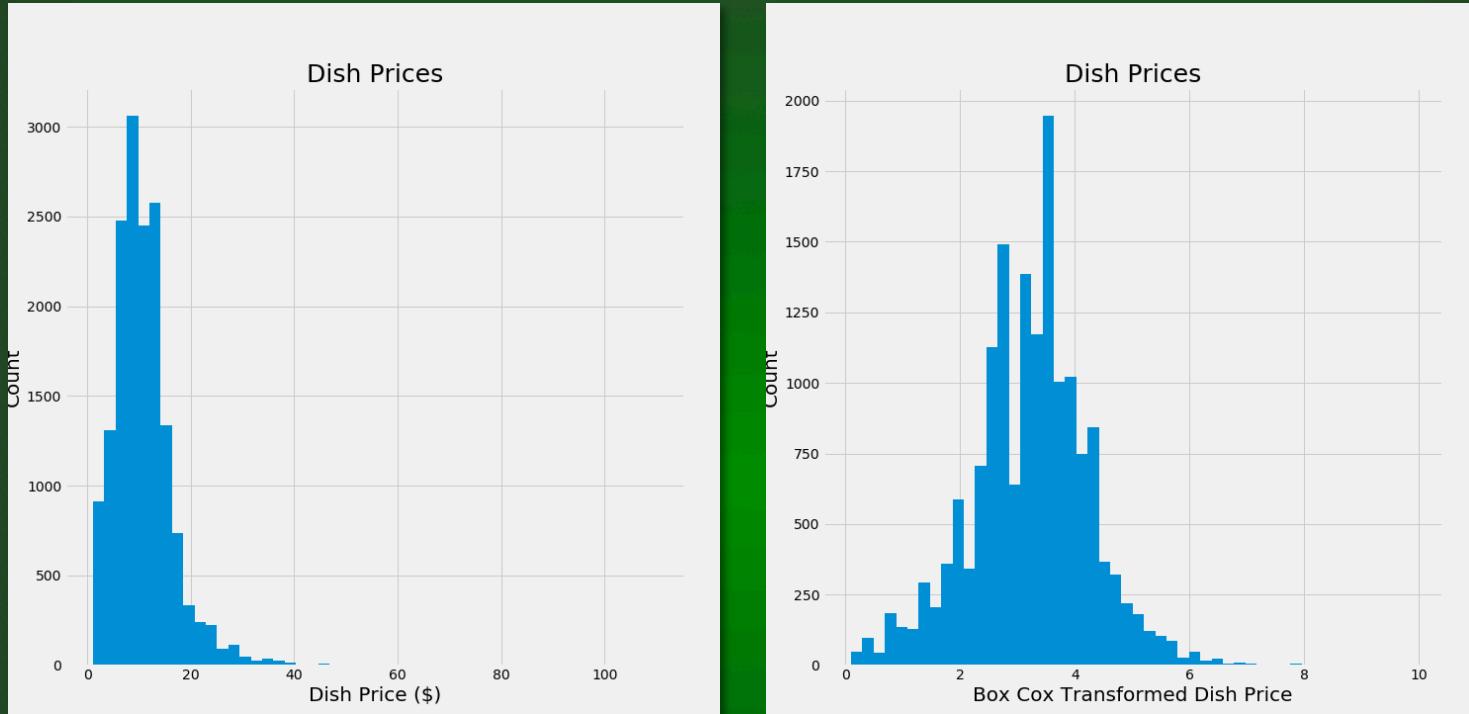
- Restaurant Menus
 - 1000+ restaurants from SF gathered
- Ingredient List
 - Compiled from bbc.com/food and foodwise
- Demographic Information
 - 2016 ACS and Economic Census from US Census



Minimization Metric

$$RMSE = \sqrt{\frac{1}{n} \sum_{i=1}^n (e_i)^2}$$

Model Building

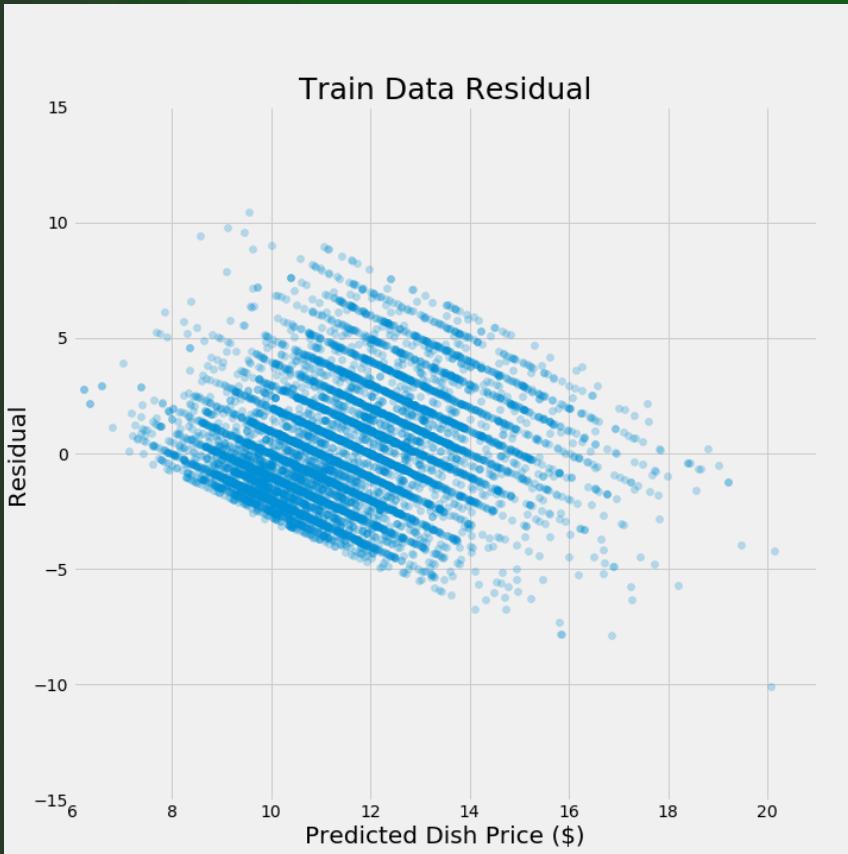


- Improvements
 - Boxcox Transformation
 - Ridge Regression
 - Prices only between \$7 and \$20

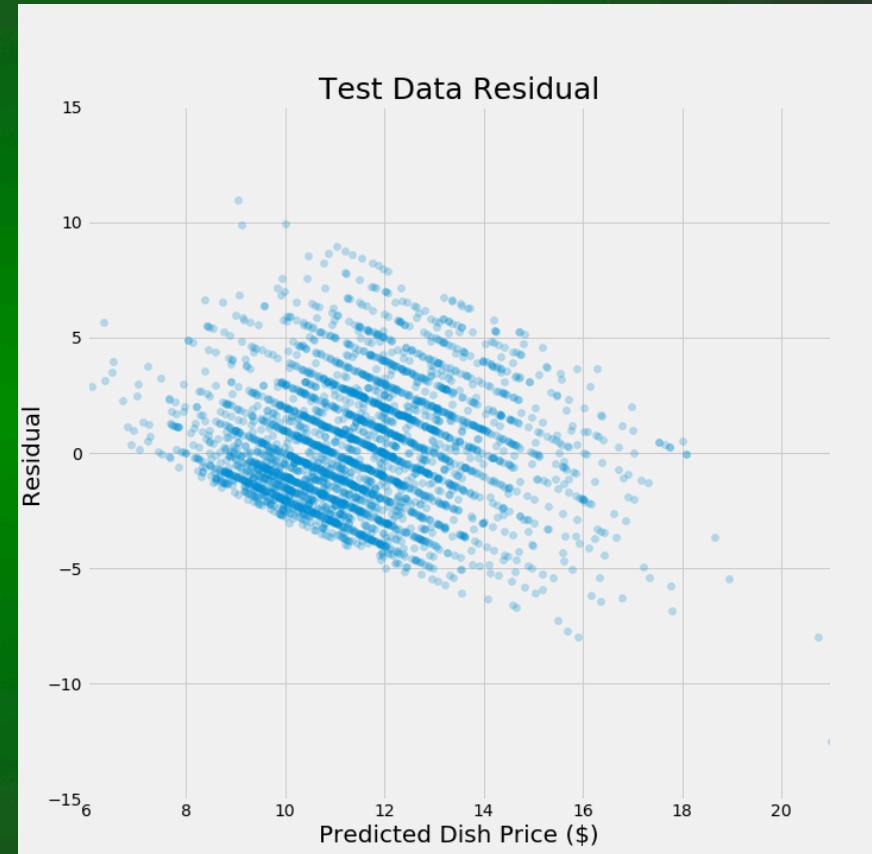
Features

Positive Features	Negative Features	Irrelevant Features
Expensive Ingredients	Cheap Ingredients	Geocoordinates
Dish Text Length	Restaurant Types	Demographic Data

Model Performance



Train RMSE: \$2.44



Test RMSE: \$2.63

Future Work

- Better suited model
 - High number of categorical features
 - Random Forest Regressor Test RMSE: \$2.41
- More Descriptive Features
- Incorporating other cities

La Taqueria is the Best

